Product Specification

8-Port 10/100/1000Mbps with 2 Shared SFP
Web Smart Switch

GSD-802S

Version 1.0

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Change History:

Revision	Date	Author	Change List
Version 1.0	2007/06/27	Kent Kang	Initial release

Author	Kent Kang	Editor:	Kent Kang
Reviewed by:		Approved by:	Tom Shih

1. PRODUCT DESCRIPTION

The PLANET GSD-802S is an 8-Port 10/100/1000Mbps Web Smart Switch, non-blocking wire-speed performance Ethernet Switch.

With a 16Gbps internal switching fabric, the Switch can handle extremely large amounts of data in a secure topology linking to a backbone or high capacity servers.

The GSD-802S could recognize up to 8K MAC Address table and provides 176KB on-chip frame buffer.

They offer wire-speed packet transfer performance without risk of packet loss. With high data throughput, the GSD-802S provides the most convenient for user to upgrade their network to Gigabit environment.

The GSD-802S provides Web Smart management functions through the Web management interface. Functions such as per port speed, duplex, IEEE 802.3x Flow-control settings and QoS settings, Trunking and VLAN, Port mirroring, all can be found in the friendly user interface of your web browser. These features provide a cost-effective way to manage the devices from Internet whenever you are at work or at home.

2. PRODUCT FEATURES

Physical Port

- **8-Port** 10/100/1000Mbps RJ-45
- **2 SFP** slots, shared with Port-7 and Port-8

Generic Features

- Complies with IEEE 802.3, 10Base-T, IEEE 802.3u, 100Base-TX, IEEE 802.3ab, 1000Base-T, IEEE 802.3z Gigabit SX/LX, IEEE 802.3af, Power over Ethernet
- Each Switching ports support auto-negotiation-10/20, 100/200 and 1000/2000Mbps supported
- Auto-MDI/MDI-X detection on each RJ-45 port
- IEEE802.3x, full-duplex flow control compliant; back-pressure, half-duplex flow control
- Store and Forward switching architecture
- Non-blocking switch fabric
- 8K MAC address table, automatic source address learning and aging
- 16Gbps switch fabric, non-blocking switch architecture
- 9K Jumbo Frame support at all speed (10/100/1000 Mbps)

Layer 2 Switching

- Port-Based and 802.1q VLAN function, up to 64 VLAN groups
- 802.1w Rapid-Spanning Tree protocol support
- Port Trunking supports to optionally increase bandwidth between switches
- Link Aggregation support static mode and LACP (802.3ad) - up to 4 Trunk groups, each trunk for up to maximum 8 ports
- Ingress Rate Limit and Egress Shaping for bandwidth control in steps of 128kbps

Multicast

- IGMP Snooping for multicast filtering, supports v1 and v2
- IGMP Query Mode supports for multimedia application

■ **Quality of Service**

- 4 priority queues on all switch port
- Support for strict priority and weighted round robin (WRR) CoS policies
- Traffic class assignment based on 802.1p tag or DSCP field
- Multicast and Broadcast Storm Control as well as Flooding Control

■ **Security**

- Port Mirroring support for dedicated port monitoring
- 802.1X Port-Based network access control, RADIUS Server Authentication
- Static MAC Address assign destination MAC address at specifies port

■ **Management**

- Remote Web management interface
- Firmware upgrade through web interface
- Cable Diagnostics technology
- Support SNMPv1 with RFC-1213/1573-Interface group and RMON Group 1 (Statistics)
- SNMP Trap
- Supports PLANET Smart-DISCOVERY Utility for deploy management

3. PRODUCT SPECIFICATION

3.1 MAIN COMPONENT

Switch ASIC:	VITESEE VSC 7398	X1
10/100/1000 PHY:	VITESEE VSC 8538	X1
Combo port PHY:	VITESEE VSC 8558	X1
Flash	SST 39VF040	X2

3.2 Functional Specifications

Product	GSD-802S 8-Port Gigabit Web Smart Switch
Hardware Specification	
Copper Ports	8 10/ 100/1000Base-T RJ-45 Auto-MDI/MDI-X ports
SFP/mini-GBIC slots	2 SFP interfaces, shared with Port-7 and Port-8
Switch Architecture	Store-and-forward
Switch Fabric	16Gbps / non-blocking

Switch throughput	11.90Mpps
Address Table	8K MAC address table with Auto learning function
Share data Buffer	176K bytes on chip
Flow Control	Back pressure for Half-Duplex IEEE 802.3x Pause Frame for Full-Duplex
Jumbo Frame	9K Bytes
LED	Power Status 1000 Link/Act , 100/10 Link/Act Status per port
Layer 2 function	
Management Interface	Web Browser, SNMPv1, v2c monitor and SNMP Trap
Port configuration	– Port disable/enable. Auto-negotiation 10/100/1000Mbps full and half duplex mode selection. – Flow Control disable / enable. – Bandwidth control on each port.
VLAN	Port-Based / 802.1Q Tagged Based VLAN Up to 64 VLAN groups
Link Aggregation	Supports 4 groups of 8-Port trunk IEEE 802.3ad LACP
QoS	Traffic classification based on 802.1p priority, DSCP field in IP Packet
IGMP Snooping	IGMP (v1/v2) Snooping, up to 64 multicast Groups
SNMP MIBs	RFC-1213 MIB-2 RFC-1573-Interface MIB RFC-2819 RMON MIB (Group 1)
Standards Conformance	
Regulation Compliance	FCC Part 15 Class A, CE
Standards Compliance	IEEE 802.3 10BASE-T IEEE 802.3u 100BASE-TX IEEE 802.3ab Gigabit 1000T IEEE 802.3x Flow Control and Back pressure IEEE 802.3ad Port trunk with LACP IEEE 802.1d Spanning tree protocol IIEEE 802.1w Rapid spanning tree protocol IEEE 802.1p Class of service IEEE 802.1Q VLAN Tagging IEEE 802.1x Port Authentication Network Control

Network Media	10Base-T – UTP/STP category 3, 4 or 5 cable 100Base-TX – UTP/STP category 5 cable 1000BaseT – UTP/STP category 5e/6 cable 1000Base-SX - 50/125 μ m, 62.5/125 μ m Multi-mode fiber cable 1000Base-LX - 50/125 μ m, 62.5/125 μ m Single-mode fiber cable

3.3 Physical Specification

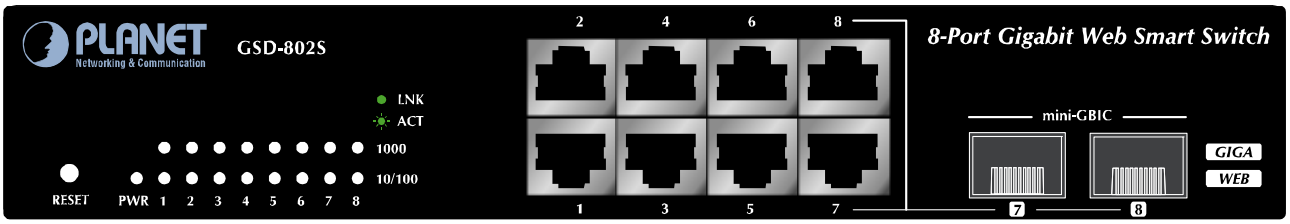
■ **Dimensions**

217mm x 135mm x 43.5mm (W x D x H)

■ **Weight:**

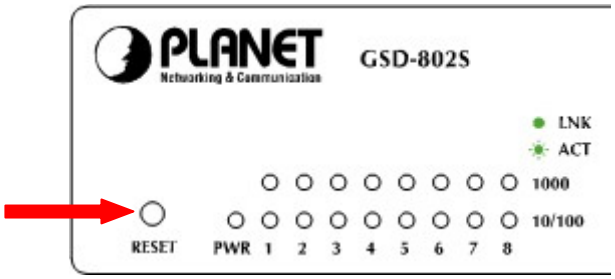
1.3kg

■ **Front panel**



■ **Real panel**

■ **One Reset button on front panel for Switch default load**



■ **LED definition**

System

LED	Color	Function
PWR	**Green**	**Lights** to indicate that the Switch is powered on.

1000Base-T ports

LED	Color	Function	
1000 LNK/ACT	**Green**	**Lights**	To indicate that the Switch is successfully connecting to the network at 1000Mbps
		Blinks	To indicate the Switch is receiving or sending data
10/100 LNK/ACT	**Green**	**Lights**	To indicate that the Switch is successfully connecting to the network at 10Mbps or 100Mbps
		Blinks	To indicate the Switch is receiving or sending data

3.4 Environmental Specification

Operating

Temperature: 0~50°C

Relative Humidity: 5~95%(non-condensing)

Storage

Temperature: -40~70°C

Relative Humidity: 5~95%(non-condensing)

3.5 Electrical Specification

Input Voltage: 100 - 240VAC, 50 – 60Hz, Auto-sensing

Power consumption: 8.7 watts / 27.31 BTU (Stand by)

Maximum Power output:

3.6 Regulatory Compliance

FCC Class A, CE.

3.7 BASIC PACKAGING

- GSD-802S X1
- User's manual (CD-ROM) X1
- Quick Installation Guide X1

- Power cord X1

3.8 REALIABILITY

MTBF > 50,000 hrs @ 25℃

3.9 Packing Dimension

Dimension: 294 mm (W) x 243 mm (D) x 80 mm (H)

Weight: 1.60 KG (Gross Weight)

5 PCS in one Carton